METHOD AND APPARATUS FOR AUDIO LOUDNESS AND DYNAMICS MATCHING

ABSTRACT

The overall loudness of an audio track is calculated by combining a number of weighted loudness measures for segments of the audio track, where the weight applied to each individual loudness measure is a function of the loudness measure. By comparing the original overall loudness measure to a desired overall loudness measure, a gain can be determined that will adjust the loudness level to the desired value. Also disclosed is a dynamic compression method that analyzes the dynamic characteristics of an audio track and determines appropriate compressor parameters. Additionally, the loudness of a post-compressor audio track can be estimated for any given compressor parameters, thus permitting post-compression loudness matching to be done even if the compression is performed in real-time.